CLAIMS:

1. An optical system, comprising:
at least one light source, which emits light substantially of a particular wavelength range in a substantially randomly polarized or unpolarized state;
at least one reflective polarizer coupled to the at least one light source; and
at least one element that redirects a portion of light reflected by the reflective polarizer through the at least one light source and back to the at least one reflective polarizer, wherein there is substantially no optical distance between the at least one light source and the at least one element.

2. The optical system as recited in claim 1, wherein the at least one light source is disposed in the element.

3. The optical system as recited in claim 2, wherein at least one light source is encased in a material of the element.

4. The optical system as recited in claim 3, wherein the at least one element is substantially solid.

5. The optical system as recited in claim 1, further comprising a quarter wave plate (QWP) disposed between the at least one reflective polarizer and the at least one element.

6. The optical system as recited in claim 1, wherein the at least one reflective polarizer is disposed over a surface of the at least one element.

7. The optical system as recited in claim 1, wherein the at least one element is a compound parabolic concentrator (CPC).

8. The optical system as recited in claim 1, further comprising a wavelength combiner disposed adjacent to the at least one optical element.

9. The optical system as recited in claim 8, further comprising an integrating rod that is optically coupled to a liquid crystal display (LCD) system.

10. The optical system as recited in claim 5, wherein another portion of the light reflected by the at least one reflective polarizer is reflected back to the at least one reflective polarizer by the element.

11. The optical system as recited in claim 8, wherein the wavelength combiner is chosen from the group consisting essentially of: a dichroic cube; a plurality of dichroic cubes; and dichroic elements.

12. The optical system as recited in claim 1, wherein the at least one light source is an array of light emitting diodes.

13. The optical system as recited in claim 1, wherein the at least one light source is a single LED.

14. The optical system as recited in claim 1, further comprising a plurality of the elements that redirect light, each of which includes: at least one of the at least one light sources; and one of the at least one reflective polarizers.

15. A method of recycling light to improve efficiency of an optical system, the method comprising:
providing at least one reflective polarizer and at least one source of unpolarized or randomly polarized light, where one of the reflective polarizers is coupled to each of the sources of unpolarized or randomly polarized light;
redirecting a portion of light reflected from the reflective polarizer through the light source and back to the reflective polarizer, which transmits light of a particular polarization state and reflects the remaining light to the element, wherein there is substantially no optical distance between the reflective polarizer and the element.

16. The method as recited in claim 15, the method further comprising polarizing at least a portion of the reflected light to the particular polarization state.

17. The method as recited in claim 15, the method further comprising combining light from at least two of the sources of unpolarized or randomly polarized light.

18. The method as recited in claim 16, the method further comprising polarizing directing the light of the particular polarization state to a liquid crystal device.

19. An optical package, comprising at least one light emitting element, which is disposed in an optical element, which redirects light reflected from one end of the element back through the light emitting device and out from the one end.

20. The optical package as recited in claim 19, wherein the light-emitting element emits randomly polarized light or unpolarized light of over a substantially finite wavelength range.

21. The optical package as recited in claim 19, wherein the at least one light-emitting element is chosen from the group consisting essentially of: a single light emitting diode and an array of light emitting diodes.

22. The optical package as recited in claim 19, wherein the light- emitting element is encased in the optical element.

23. The optical package as recited in claim 19, wherein the optical element is a compound parabolic combiner.